

## CLAIMS

- 5 1. Method of obtaining 2-mercaptobenzothiazole from a melt of the raw product prepared by the reaction of aniline, carbon disulphide and sulphur by pressure synthesis in a reactor, where the melt contains 2-mercaptobenzothiazole, unreacted raw materials, intermediate products and pitches, characterized in that after reaching a stationary state of the reaction  
10 medium it includes the following steps:
- a) crystallization of the 2-mercaptobenzothiazole raw product from an aniline solution,
  - b) dividing the liquid phase ( $F_K$ ) from crystallization from step a) in three parts,
  - 15 c) removing one part of the liquid phase ( $F_{K1}$ ) from crystallization from step a) out of the process,
  - d) returning the second part of the liquid phase ( $F_{K2}$ ) from crystallization from step a) into the reactor for preparation of the raw product and supplementing it with sulphur and carbon disulphide with respect to aniline,
  - 20 e) final purification of the crystallized 2-mercaptobenzothiazole from step a) in the aniline liquid phase and separation of the pure 2-mercaptobenzothiazole,
  - f) using the third part of the liquid phase ( $F_{K3}$ ) from crystallization from step a), supplemented with the liquid phase ( $F_R$ ) from final purification from step e) and possibly with aniline for crystallization of a further batch of the 2-mercaptobenzothiazole raw product,
  - 25 g) using the liquid phase ( $F_R$ ) from final purification from step f), together with a part of the liquid phase ( $F_{K3}$ ) from step e), possibly with aniline, for crystallization of the 2-mercaptobenzothiazole raw product,
  - h) repeating steps a) to g).
- 30 2. Method according to claim 1, characterized in that in the step c) 5 to 20 % of the liquid phase from crystallization are removed.

3. Method according to claim 1, characterized in that the crystallization of the 2-mercaptobenzothiazole raw product is performed from the aniline liquid phase from the preceding crystallization and/or from the aniline liquid phase from final purification and/or from pure aniline.

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4. Method according to claim 1, characterized in that the aniline liquid phase in step f) for final purification of 2-mercaptobenzothiazole is pure aniline or regenerated aniline or aniline liquid phase from the preceding final purification or a solution of 2-mercaptobenzothiazole in aniline or any combination thereof.

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5. Method according to claim 4, characterized in that the aniline liquid phase in step f) for final purification of 2-mercaptobenzothiazole is a saturated solution of 2-mercaptobenzothiazole in aniline.

15 6. Method according to claim 1, characterized in that 2-mercaptobenzothiazole obtained in step a) is finally purified by wash separation.

7. Method according to claim 1, characterized in that 2-mercaptobenzothiazole obtained in step a) is finally purified by washing.

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8. Method according to claim 7, characterized in that 2-mercaptobenzothiazole obtained in step a) is finally purified by washing on a filter.

9. Method according to claim 7, characterized in that 2-mercaptobenzothiazole  
25 obtained in step a) is finally purified by washing in a centrifuge.